roof is reached, so this itself forms a thin layer of Hind material, which, owing to adhesion is held fast by the cover, and does not further appear an eviL But if it has, however, reached formation of "icicles," so now these "icicles" ahvayH draw away the freshly melted masses from the cover, and thus always expose new portions thereof to the action of the flame. In order to bring this destruction to a cessation, the cooling down of the furnace must now be carried further; than otherwise, and of this many rnelters have an unjustifiable timidity, since they fear thereby to cool down the charge, and thuB cause still greater calamity.
Usually the outlet end of the furnace in overheated, and such overheating is most simply put nn end to again by .reversal of the direction of the llame. Bad ruelterB see thero-from, in reversal, the only healing remedy for the furnace if it is burnt, and perform this at random in even* smaller intervals. But if the port-blocks and the roof at the furnace end are overheated, so indeed also the chambers belonging to them become hotter, and in consequence the temperature of combustion, if now again the overheated end in made into the entrance end, be higher than in normal working. Thus one must, in order to again attain a normal condition, lot the flame now go longer from this end, and just BO long an the chambers are again brought to their normal temperature. Themoaim would be proved, if thereby the other end of the furnace wore not too highly heated, and the same bad phenomenon would not appear there. In order to hinder this there in only one moans, and that is the diminution of the quantity of heat absolutely produced, which can only be obtained by diminution of the gas supplied.
Of course, one can employ other quicker-acting moans, but which are of smaller duration, such an completely cutting off the air for combustion, or totally shutting off the heating gas, and passing *of air alone through the furnace for Home minutes.
Further, it will often be proposed in such cases to artificially reduce the temperature of combustion, in Hitch manner that one increases the amount of the products of combustion, which at the moment of combustion take up the heat generated.